

STEPHENS' KANGAROO RAT  
PHASE ONE STUDY  
FOR TPM 20826-GIFFIN

SAN DIEGO COUNTY, CALIFORNIA

APN: 281-540-19

Total Property Acreage 5.1

Prepared for  
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Survey Date: May 19, 2005

Report Date: May 31, 2005

This report was prepared in accordance with professional requirements and recommended protocols for small mammal studies (USFWS Permit TE068072-0 and current CDFG MOU).



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Philippe Jean Vergne, Field Biologist and Preparer

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JAN 02 2007  
DEPARTMENT OF PLANNING  
AND LAND USE

TPM 20826; Log Number 04-09-008

**SUBJECT:** Phase One Stephen's Kangaroo Rat Evaluation on APN-281-540-19

## **Introduction**

Philippe Vergne a certified k-rat and small mammal biologist (TE831207-2) conducted a habitat evaluation for the Stephens' kangaroo rat ( (*Dipodomys stephensi*)-SKR on the estimated 5.1 acre parcel number 281-540-19, located to the north of Montecito Road in Ramona, San Diego County, California.

A phase one walkover was needed to determine the potential for presence or absence of the Stephens kangaroo rat on site.

The project is located to the north of Montecito Road, across from the intersection with Matthews Court, in Ramona, California (Figure One). The proposed project calls for a lot split.

## **Methods**

### **Habitat Evaluation Surveys**

Philippe Vergne conducted a walkover survey of the site on May 19, 2005.

Transects were walked over the entire property and immediately adjacent areas. Signs searched for included burrows, scat, dust baths and tracks/tail drags.

### **Weather**

Temperatures were in the low seventies. Winds were at less than three miles per hour. Skies were clear.

### **Topography and Soils**

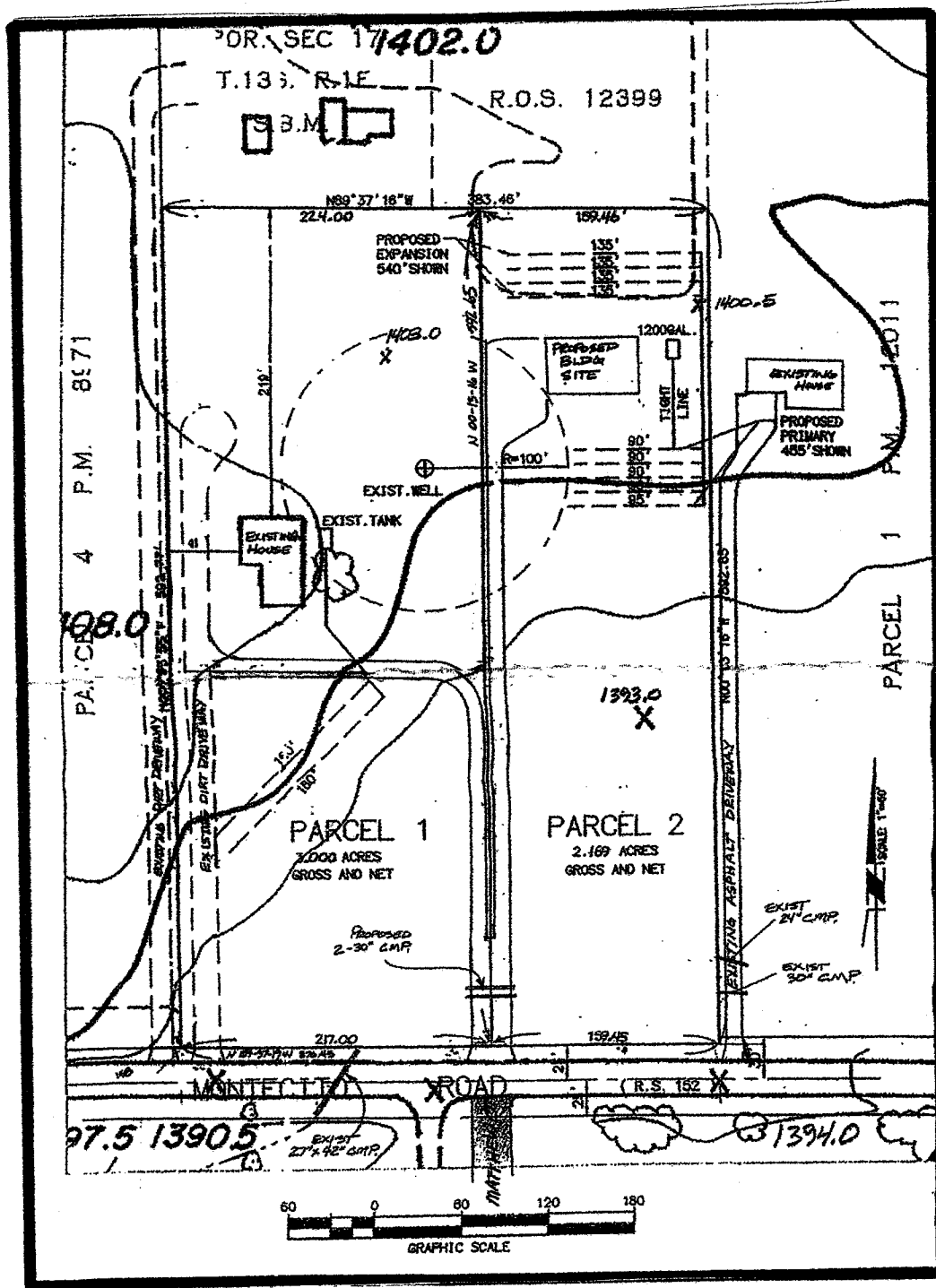
Topography on the project area ranges from flat to a gentle northwest to southeast slope. The surface soils within the project boundaries are sandy loams suitable for use by small fossorial mammals including SKR.

### **Plant Communities**

The property supports dense ruderal and highly disturbed annual grasslands, ornamental plantings including lawns, houses, a barn, and related structures and disturbed areas.

The ruderal/non-native grassland plant community is composed of annual grasses, weeds and sparse emergent scrub. Plant species within this community consists of bromes such as red brome (*Bromus madritensis*) and ripgut grass (*Bromus diandrus*); herbaceous annuals such as red-stemmed filaree (*Erodium cicutarium*), doveweed (*Eremocarpus setigerus*), and short-podded mustard (*Hirschfeldia incana*).

**APN 281-540-19 Tentative Parcel Map**



## **Wildlife**

Observations of wildlife included scat, trails, tracks, burrows, skeletal remains, calls and visual sightings. Other than birds wildlife species on site were extremely limited in number. These included side blotched lizard (*Uta stansburiana*), and Beechey ground squirrel (*Spermophilus beecheyi*).

The paucity of mammal species is indicative of the highly disturbed nature of the site and dense grass cover.

## **Potential Sensitive small Mammal Resources**

Three sensitive mammal species were identified as potentially present in the vicinity of the project. They are the Stephens' kangaroo rat (*Dipodomys stephensi*), the northwestern San Diego pocket mouse (*Chaetodipus fallax fallax*) and the San Diego desert woodrat (*Neotoma lepida intermedia*).

### **Stephens' Kangaroo Rat**

The Stephens' kangaroo rat (*Dipodomys stephensi*), a nocturnal rodent of the Heteromyidae family, is one of several kangaroo rat species in its range. The Dulzura kangaroo rat (*Dipodomys simulans*) and the Pacific kangaroo rat (*Dipodomys agilis*) occur in areas occupied by the Stephens' kangaroo rat, but these other species have a wider habitat range. Only the Dulzura and the Stephens' kangaroo rats are currently known to be present in the proposed project area.

The SKR is primarily a seed eater, feeding on the seeds of both annual and shrub species. It also feeds on green vegetation and insects when these are available. Being primarily a desert species, the SKR obtains nearly all of its water from the food it eats, and can subsist indefinitely on water extracted from dry seeds. It forages in open ground and near shrubs. Burrows are dug in loose soil, usually in open areas.

In response to habitat losses within a major portion of its range, SKR was listed as federally endangered by the U.S. Fish and Wildlife Service (USFWS) (Kramer 1988). It is also listed as threatened by the California Department of Fish and Game. The designation of SKR as an endangered species resulted in the development of management plans with the aim of managing sustainable populations in different parts of the species range.

Populations of SKR have been documented to the east of the project site (Vergne 2002).

### **Project Findings**

No k-rat sign was observed on the property. The Stephens' kangaroo rat is not present on the property. The habitat quality and type is not conducive to future potential colonization by kangaroo rats.

### Northwestern San Diego Pocket Mouse

The northwestern San Diego pocket mouse (*Chaetodipus fallax fallax*) prefers habitat similar to that preferred by the SBKR. The northwestern San Diego pocket mouse occurs in open, sandy areas in the valleys and foothills of southwestern California.

The range of this species extends from Orange County to San Diego County, and includes Riverside and San Bernardino counties. This mouse is a California Species of Special Concern whose historical range has been reduced by urban development and agriculture.

#### Project Findings

Due to vegetation type and disturbances this species is not expected to occur on the property.

### San Diego Desert Woodrat

The desert woodrat (*Neotoma lepida*) is a relatively wide-ranging species extending along the coast of California from south of San Francisco through to the border with Baja California. This species also occurs in the Central Valley and the deserts of southern California and extends along the desert side of the Sierra Nevada into southeastern Oregon.

The coastal race of the desert woodrat, the San Diego desert woodrat (*Neotoma lepida intermedia*), prefers scrub habitats such as coastal sage scrub, chaparral and alluvial fan scrub. It is more common in areas with rock piles and coarse sandy to rocky soils throughout coastal southern California.

The range of this species extends from just south of Sacramento and the San Francisco area to the border with Baja California. The coastal subspecies of the widespread *Neotoma lepida* is listed as a California Species of Special Concern (CSC) whose historical range has been impacted by the conversion of scrub habitats into residential, commercial and industrial use.

#### Project Findings

Not currently present on the property and not expected to occur due to site conditions.

### Conclusions

Prior to the field investigation, review of the available literature, site conditions, and regional location indicated that there was a probability for SKR to occur on the project site.

A site specific phase one field study was performed. During the field survey, no sign attributable to k-rats was found on the property. The Stephens' kangaroo rat is not present on the property. The habitat quality and type is not conducive to future potential colonization by Stephens' kangaroo rats.

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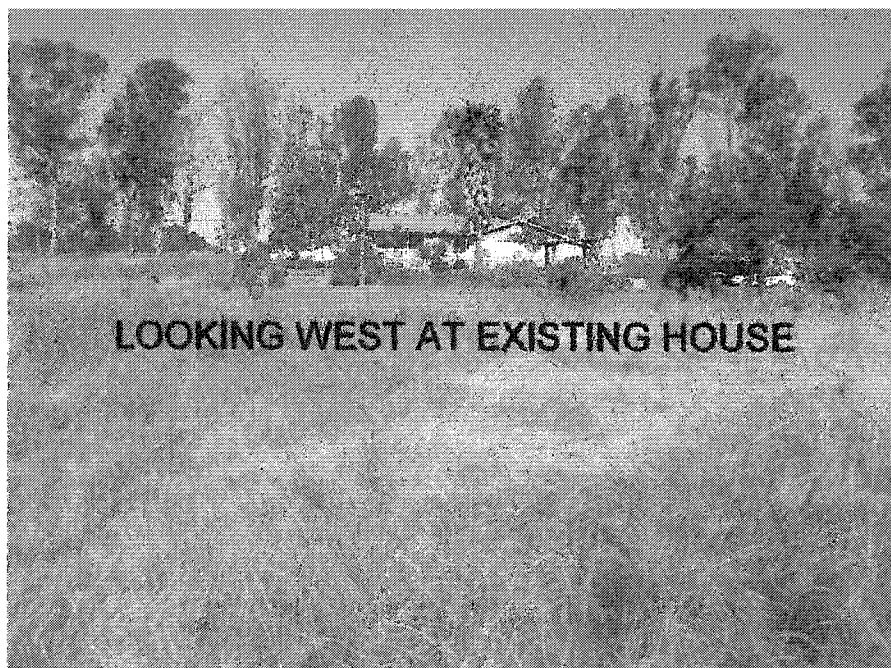
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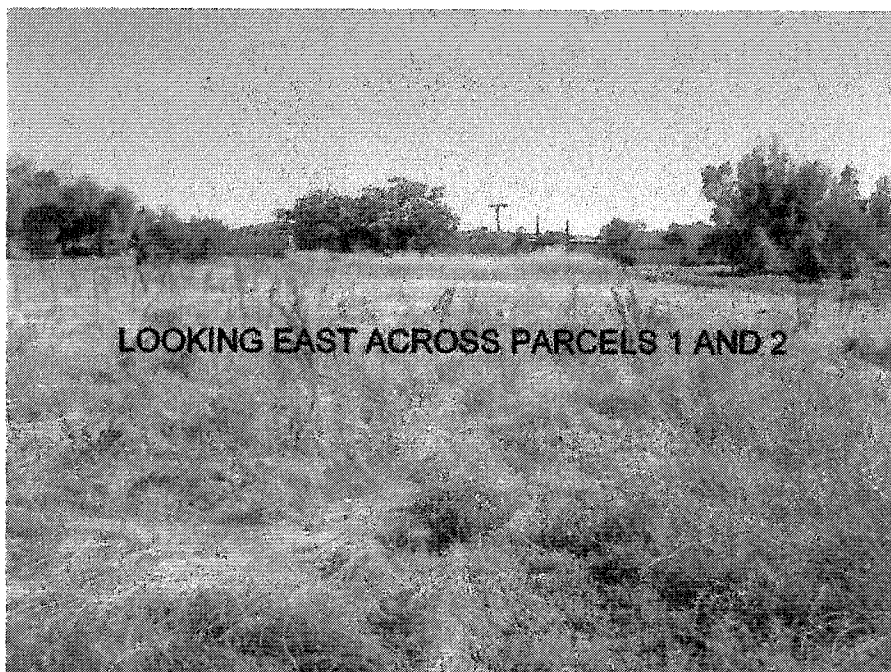
**SITE PHOTOGRAPHS**

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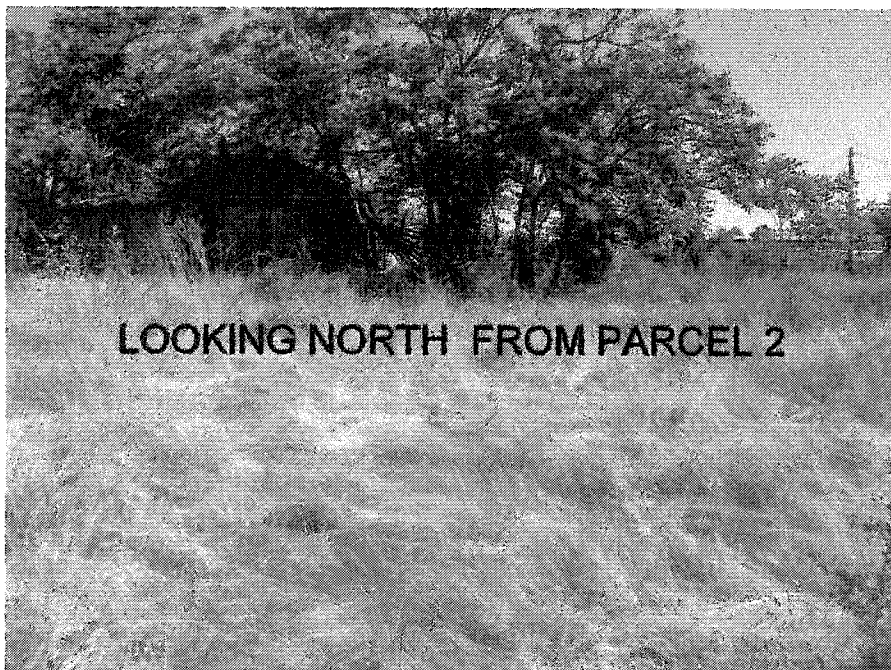




LOOKING WEST AT EXISTING HOUSE



LOOKING EAST ACROSS PARCELS 1 AND 2



LOOKING NORTH FROM PARCEL 2